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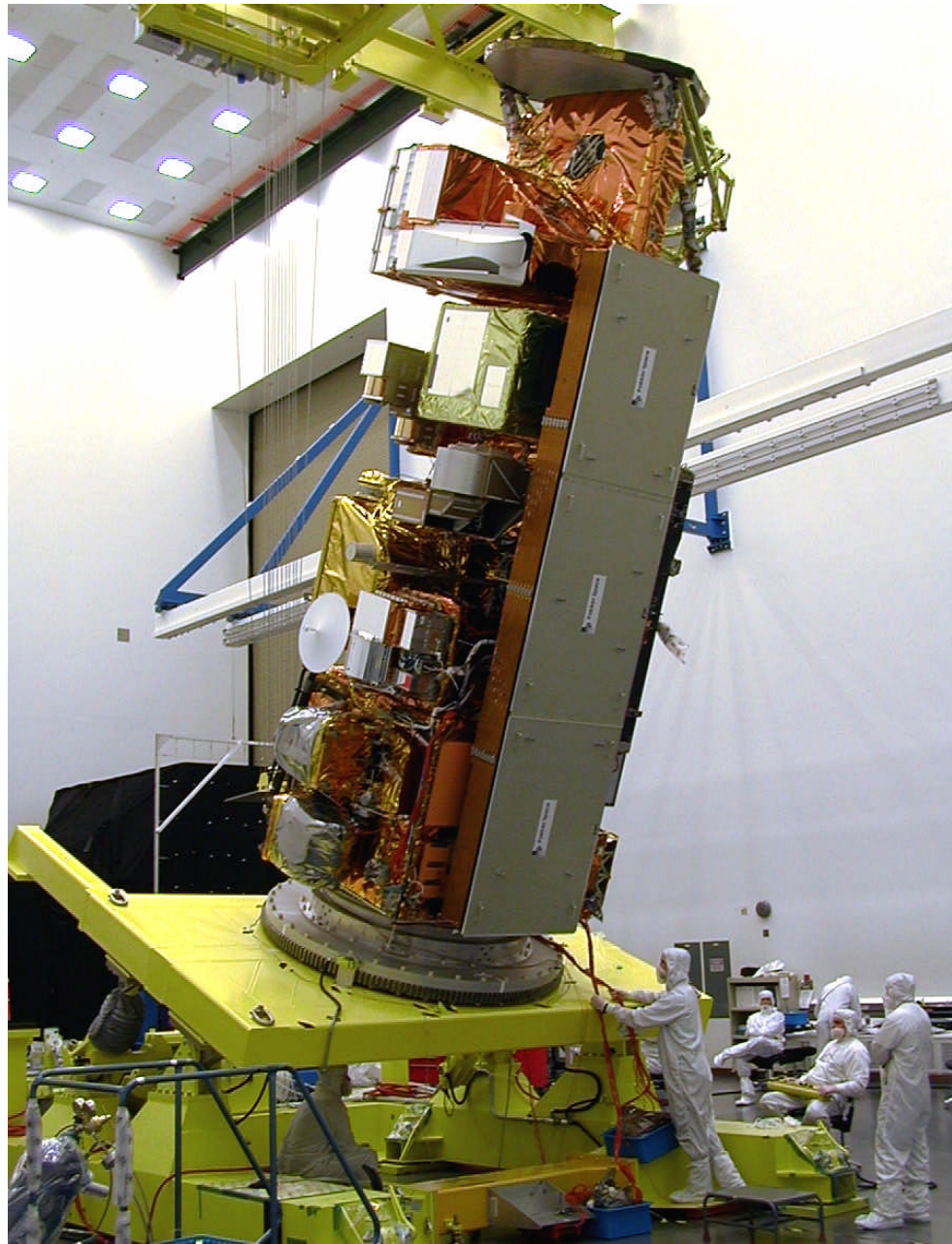
# *Status of the Aqua Mission*

*Claire L. Parkinson  
Aqua Project Scientist  
NASA Goddard Space Flight Center*

*1/25/2000 Presentation at the MODIS  
Science Team meeting*

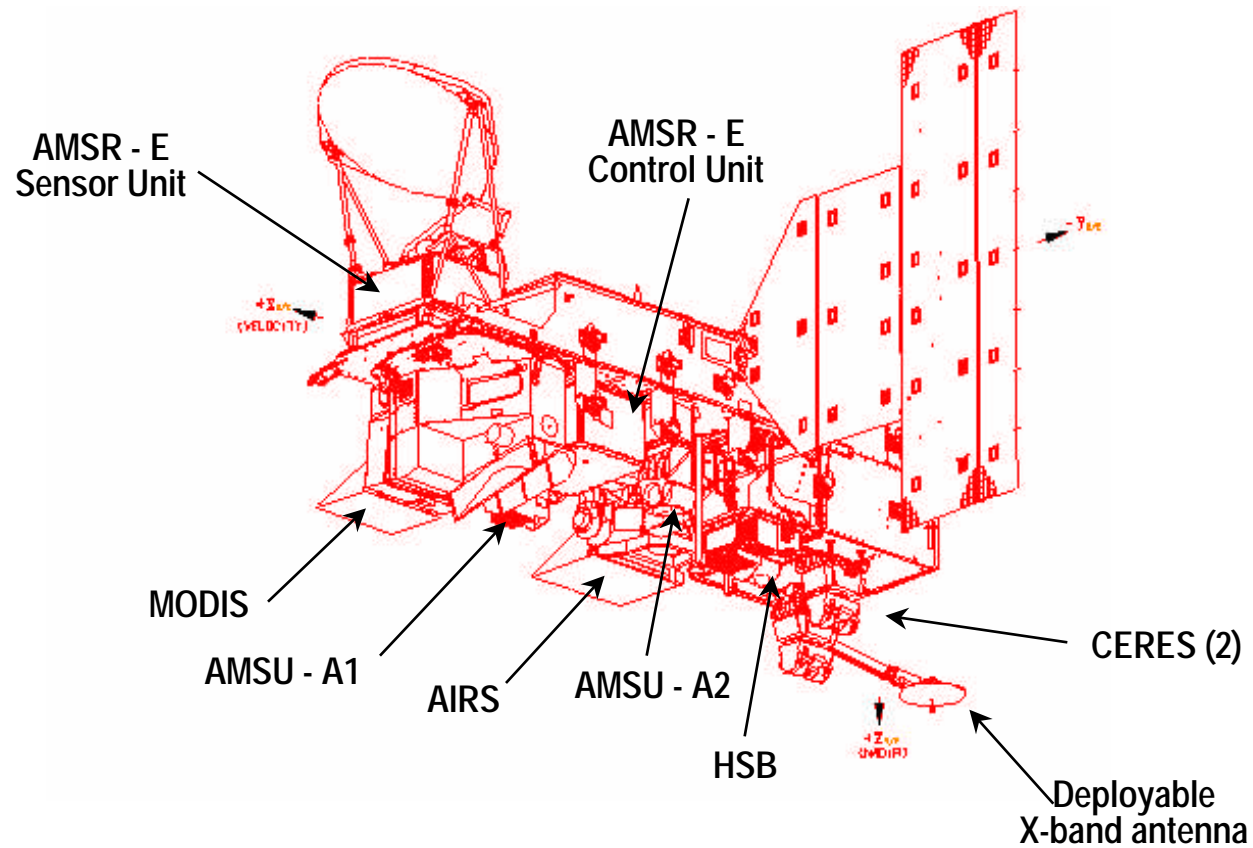
# Hardware Status, p.1

*All instruments  
are on board  
the spacecraft,  
at TRW.*



# Hardware Status, p.2

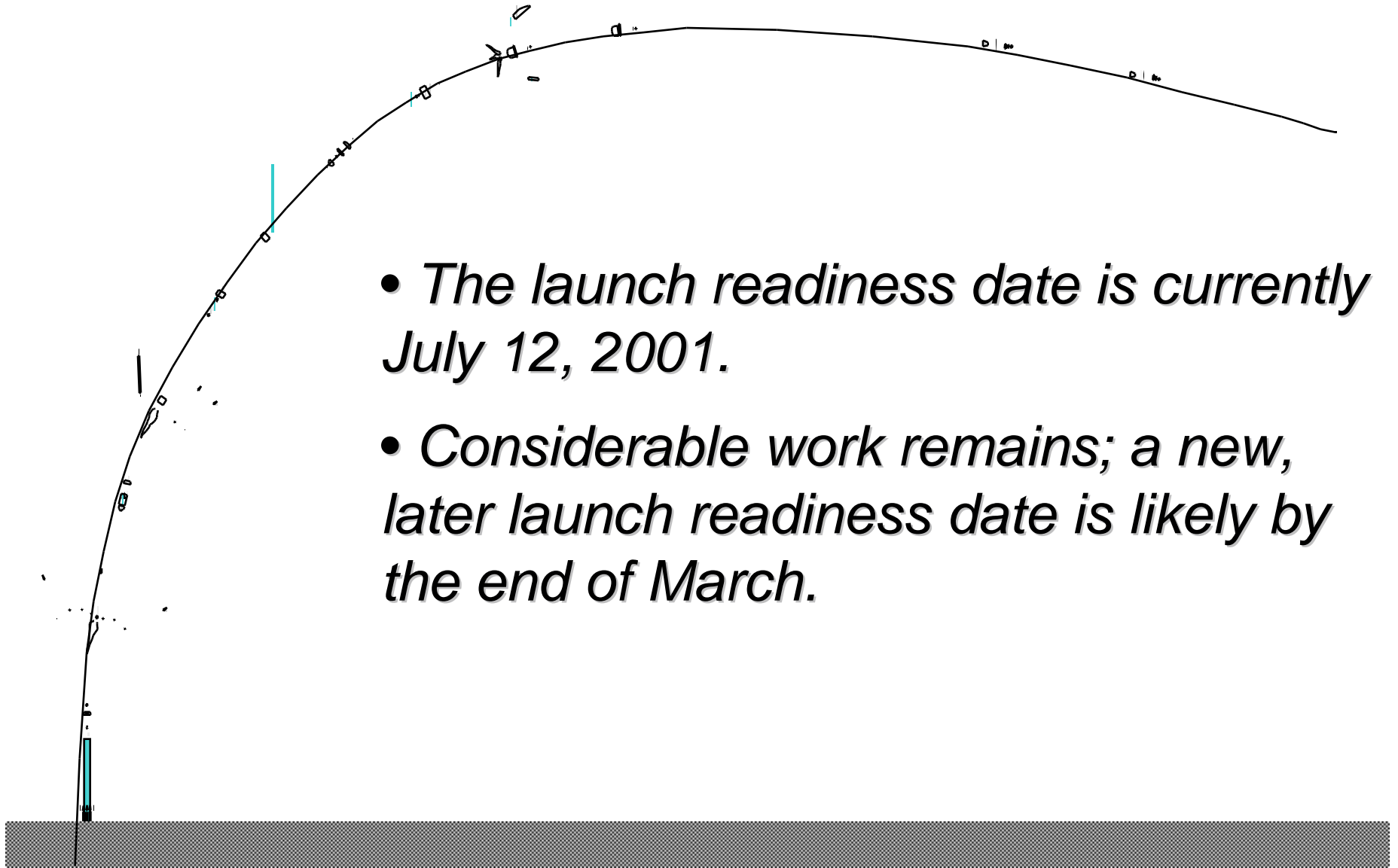
*Schematic of the deployed spacecraft:*



## *Hardware Status, p.3: Update since the last MODIS Team meeting.*

- *Electrical integration of the instruments onto the spacecraft was completed in mid-2000.*
- *The spacecraft's 1st Comprehensive Performance Test (CPT) was completed on August 23, 2000.*
- *The spacecraft's Electromagnetic Interference testing was completed on October 12, 2000.*
- *Two MODIS circuit boards were modified in October 2000, to reduce temperature saturation on bands 31 and 32 from 400 K to 340 K and thereby improve SST retrievals.*
- *The solar array was installed in November 2000.*

# Launch Status



# *Major Steps Remaining Prior to Launch, with current schedule*

- *Full system (hardware and software) CPT, Jan. 28 - Feb. 8, 2001.*
- *Thermal vacuum test, March 1 – April 11.*
- *Reinstallation of the solar array and installation of the flight battery, April 26 - May 6.*
- *Test of the AMSR-E deployment, May 7-10, during another CPT, May 7-11.*
- *Preparation for June 1 shipment from TRW to Vandenberg Air Force Base.*



# *Major Recent Science Activities, p.1*

- *The CERES and MODIS Teams are receiving and analyzing Terra data.*
- *The CERES and MODIS teams are conducting validation campaigns.*  
*Highlights:*
  - *SAFARI 2000*
  - *Chesapeake Lighthouse and Aircraft Measurements for Satellites (CLAMS) 2000.*



*Sample MODIS Image*

## *Major Recent Science Activities, p.2*

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- *Most of the AMSR-E and AIRS/AMSU/HSB ATBDs were updated in November and December 2000, following the March ATBD review panel.*
- *The AMSR-E and AIRS/AMSU/HSB at-launch algorithms have been delivered.*
- *Validation plans are being adjusted as a result of the launch delay.*
- *Results from the NRA for AIRS/AMSU/HSB and AMSR-E validation studies are expected to be announced in mid-February 2001.*



# *Major Recent Science Activities, p.3*

- *The AIRS Science Team is working with U.S. and European weather prediction agencies to facilitate near-real-time incorporation of AIRS data into weather forecasting models.*
- *A pre-launch aircraft campaign (Meltpond 2000) for validation of the AMSR-E sea ice algorithm took place June-July 2000 based out of Thule, Greenland.*



# *Constellation Flying of the Afternoon Satellites*

- *Aqua, PICASSO-CENA, Cloudsat, PARASOL, and Aura.*
- *Major benefits expected in cloud studies, radiation studies, aerosol studies, and others.*
- *Aqua leads the train and is not being asked to alter its orbit.*

## EOS Data Products Handbook

### Volume 2

ACRIMSAT  
• ACRIM III

#### Aqua

- AIRS
- AMSR-E
- AMSU-A
- CERES
- HSB
- MODIS

#### Jason-1

- Poseidon-2

#### Landsat 7

- ETM+

#### Meteor 3M

- SAGE III

#### QuikScat

- SeaWinds

#### QuikTOMS

- TOMS

#### VCL

- MBLA

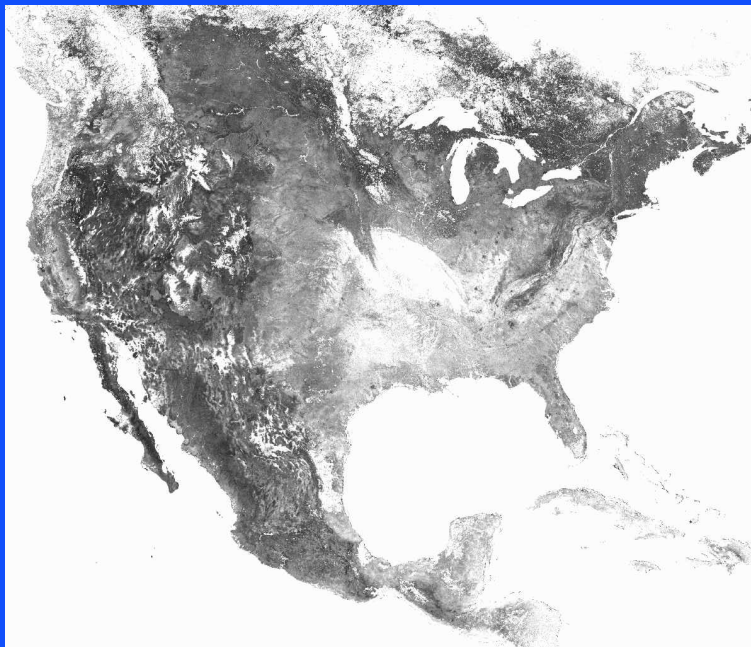


## Data Products Handbook, volume 2

- *Available in hard copy; October 2000 publication date.*
- *Also available at <http://eos.nasa.gov>.*
- *Covers Aqua, ACRIMSAT, Jason-1, Landsat 7, Meteor 3M, QuikScat, QuikTOMS, and VCL.*

# Data Products Handbook Product Summaries

- *Product Description*
- *Research and Applications*
- *Data Set Evolution*
- *Suggested Reading*
- *Boxed Product Summary*
- *Possible Image*



## *MOD 43 Product Summary*

*Coverage:* Global land surface

*Spatial/Temporal Characteristics:* 1 km, 16 km, 0.5°/16-day; 0.25°/32-day

*Key Science Applications:* Biogeochemical-cycle modeling, net primary productivity estimation, global climate models

*Key Geophysical Parameters:* Bidirectional reflectance, spectral albedo

*Processing Level:* 3

*Product Type:* Standard, at-launch

*File Size, Frequency, Data Format, and DAAC information:* ...

*Sci. Team Contacts:* A. Strahler, J. P. Muller

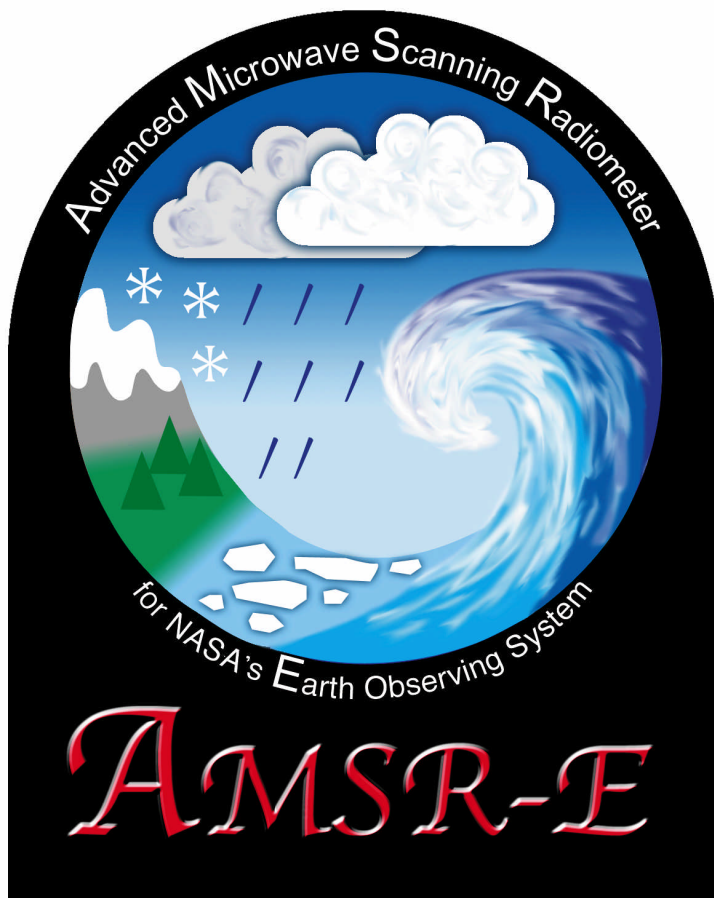
*North America albedo map for April 22 – May 7, 2000 from MOD 43*



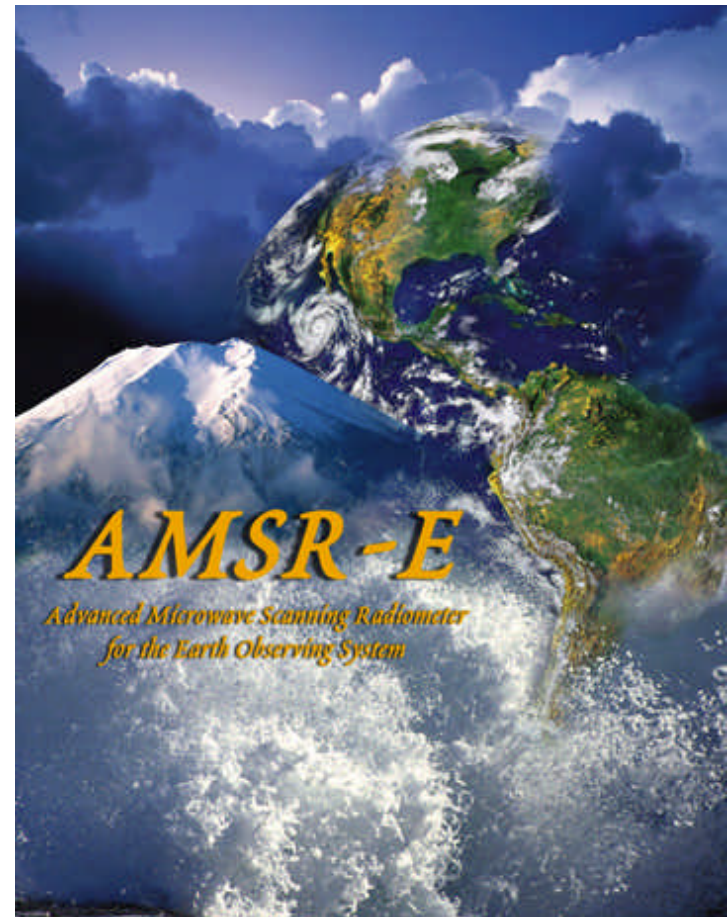
# Recent Outreach Products

(a) Water Cycle Fact Sheet, available in hard copy and at <http://earthobservatory.nasa.gov>.

(b) AMSR-E logo.



(c) AMSR-E brochure.





# *Current Outreach Plans*

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- *Earth Observatory website, ongoing*
- *Aqua science website, in preparation*
- *Weather Forecasting Fact Sheet*
- *AIRS/AMSU/HSB and Aqua brochures*
- *Aqua Science Writers' Guide*
- *Live webcast at the launch*

# *Personnel Changes*

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- *The current Aqua Project Manager, George Morrow, is leaving NASA on February 9. His replacement will be Phil Sabelhaus.*
- *The Aqua Integrated Mission Timeline engineer, Kathy Amidon, left the Project on January 12. Her tasks have been taken over by Fran Wasiak.*
- *Allen Kenitzer, the EOS pre-launch contact in the GSFC Public Affairs Office, and Kevin Ward of the Earth Observatory have both recently left.*

# *Next Aqua Science Working Group meeting*

- *February 8, 2001, 8:30 a.m. – 4:00 p.m., GSFC, building 33, room H114.*
- *Major topics:*
  - *First light images, Terra experience and plans for Aqua*
  - *Constellation flying of the EOS afternoon satellites*
  - *Issue of whether to have a special Aqua issue of IEEE, JGR, etc.*
  - *Updates from the Aqua science teams, the Aqua validation working group, the EOS data processing committee, the Aqua Integrated Mission Timeline team, and the GSFC Public Affairs Office*